

SEQUENCE LISTING

<110> Manoharan, Muthiah

<120> PROTECTED MONOMERS

<130> 14174-070US1

<150> PCT/US2004/011822

<151> 2004-04-16

<150> US 60/465,665

<151> 2003-04-25

<150> US 60/463,772

<151> 2003-04-17

<150> US 60/469,612

<151> 2003-05-09

<150> US 60/465,802

<151> 2003-04-25

<150> US 60/493,986

<151> 2003-08-08

<150> US 60/494,597

<151> 2003-08-11

<150> US 60/506,341

<151> 2003-09-26

<150> US 60/510,246

<151> 2003-10-09

<150> US 60/510,318

<151> 2003-10-10

<150> US 60/518,453

<151> 2003-11-07

<150> PCT/US04/07070

<151> 2004-03-08

<150> PCT/US04/010586

<151> 2004-04-05

<150> PCT/US04/011255

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<160> 28

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<220>
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 Arg Gln Ile Lys Ile Trp Phe Gln Asn Arg Arg Met Lys Trp Lys Lys
 1 5 10 15

<210> 2
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 <212> PRT
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<220>
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<400> 2
 Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg Pro Pro Gln Cys
 1 5 10

<210> 3
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 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Exemplary Cell Permeation Peptide

<400> 3
 Gly Ala Leu Phe Leu Gly Trp Leu Gly Ala Ala Gly Ser Thr Met Gly
 1 5 10 15
 Ala Trp Ser Gln Pro Lys Lys Lys Arg Lys Val
 20 25

<210> 4
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 <212> PRT
 <213> Artificial Sequence

<220>
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<400> 4
 Leu Leu Ile Ile Leu Arg Arg Arg Ile Arg Lys Gln Ala His Ala His
 1 5 10 15
 Ser Lys

<210> 5
 <211> 26
 <212> PRT
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<220>

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<400> 5

Gly	Trp	Thr	Leu	Asn	Ser	Ala	Gly	Tyr	Leu	Leu	Lys	Ile	Asn	Leu	Lys
1				5				10					15		
Ala	Leu	Ala	Ala	Leu	Ala	Lys	Lys	Ile	Leu						
			20					25							

<210> 6

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<212> PRT

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<220>

<223> Amphiphilic model peptide

<400> 6

Lys	Leu	Ala	Leu	Lys	Leu	Ala	Leu	Lys	Ala	Leu	Lys	Ala	Ala	Leu	Lys
1				5				10					15		
Leu	Ala														

<210> 7

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Exemplary Cell Permeation Peptide

<400> 7

Arg	Arg	Arg	Arg	Arg	Arg	Arg	Arg	Arg
1				5				

<210> 8

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Exemplary Cell Permeation Peptide

<400> 8

Lys	Phe	Phe	Lys	Phe	Phe	Lys	Phe	Phe	Lys
1			5				10		

<210> 9

<211> 37

<212> PRT

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<223> Exemplary Cell Permeation Peptides

<400> 9

Leu Leu Gly Asp Phe Phe Arg Lys Ser Lys Glu Lys Ile Gly Lys Glu

1	5	10	15													
Phe	Lys	Arg	Ile	Val	Gln	Arg	Ile	Lys	Asp	Phe	Leu	Arg	Asn	Leu	Val	
	20		25										30			
Pro	Arg	Thr	Glu	Ser												
	35															

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<400> 10
Ser Trp Leu Ser Lys Thr Ala Lys Lys Leu Glu Asn Ser Ala Lys Lys
1 5 10 15
Arg Ile Ser Glu Gly Ile Ala Ile Ala Ile Gln Gly Gly Pro Arg
20 25 30

<210> 11
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 <212> PRT
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<220>
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<400> 11
Ala Cys Tyr Cys Arg Ile Pro Ala Cys Ile Ala Gly Glu Arg Arg Tyr
1 5 10 15
Gly Thr Cys Ile Tyr Gln Gly Arg Leu Trp Ala Phe Cys Cys
20 25 30

<210> 12
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<220>
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<400> 12
Asp His Tyr Asn Cys Val Ser Ser Gly Gly Gln Cys Leu Tyr Ser Ala
1 5 10 15
Cys Pro Ile Phe Thr Lys Ile Gln Gly Thr Cys Tyr Arg Gly Lys Ala
20 25 30
Lys Cys Cys Lys
35

<210> 13
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<220>
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<400> 13
 Arg Lys Cys Arg Ile Val Val Ile Arg Val Cys Arg
 1 5 10

<210> 14
 <211> 42
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Exemplary Cell Permeation Peptides

<400> 14
 Arg Arg Arg Pro Arg Pro Pro Tyr Leu Pro Arg Pro Arg Pro Pro Pro
 1 5 10 15
 Phe Phe Pro Pro Arg Leu Pro Pro Arg Ile Pro Pro Gly Phe Pro Pro
 20 25 30
 Arg Phe Pro Pro Arg Phe Pro Gly Lys Arg
 35 40

<210> 15
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<400> 15
 Ile Leu Pro Trp Lys Trp Pro Trp Trp Pro Trp Arg Arg
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<210> 16
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<220>
 <223> Synthetically generated peptide

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 Ala Ala Val Ala Leu Leu Pro Ala Val Leu Leu Ala Leu Leu Ala Pro
 1 5 10 15

<210> 17
 <211> 11
 <212> PRT
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<220>
 <223> Synthetically generated peptide

<400> 17
 Ala Ala Leu Leu Pro Val Leu Leu Ala Ala Pro
 1 5 10

<210> 18
 <211> 13
 <212> PRT
 <213> Human immunodeficiency virus

<400> 18
 Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg Pro Pro Gln
 1 5 10

<210> 19
 <211> 16
 <212> PRT
 <213> Drosophila Antennapedia

<400> 19
 Arg Gln Ile Lys Ile Trp Phe Gln Asn Arg Arg Met Lys Trp Lys Lys
 1 5 10 15

<210> 20
 <211> 21
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> "Dual targeting" siRNAs

<220>
 <221> misc_feature
 <222> 20, 21
 <223> n = dT= deoxythymidine

<400> 20
 uaccagcacc caggugcugn n

21

<210> 21
 <211> 21
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> "Dual targeting" siRNAs

<220>
 <221> misc_feature
 <222> 20, 21
 <223> n = dT= deoxythymidine

<400> 21
 ccgggcaucc ggacgaguun n

21

<210> 22
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 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Dual targeting siRNA

<220>
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 <222> 1, 2
 <223> n = dT= deoxythymidine

<400> 22
 nnaugguagu gggucgacga c

21

<210> 23
 <211> 21
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> "Dual targeting" siRNAs

<220>
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 <222> 1, 2
 <223> n = dT= deoxythymidine

<400> 23
 nnggcccguc gcccgacuca a

21

<210> 24
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<220>
 <223> Pseudocomplementary, bifunctional siRNA

<220>
 <221> misc_feature
 <222> 5
 <223> n = A* = 2-aminoadenine

<220>
 <221> misc_feature
 <222> 20, 21
 <223> n = dT= deoxythymidine

<400> 24
 uaccngcacc caggugcugn n

21

<210> 25
 <211> 21
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Pseudocomplementary, bifunctional siRNA

<220>
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 <222> 16

<223> n = A* = 2-aminoadenine

<220>

<221> misc_feature

<222> 20, 21

<223> n = dT= deoxythymidine

<400>25

ccgggcaucc ggacgnguun n

21

<210> 26

<211> 21

<212> DNA

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<223> Pseudocomplementary, bifunctional siRNA

<220>

<221> misc_feature

<222> 1, 2

<223> n = dT= deoxythymidine

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<221> misc_feature

<222> 7

<223> n = U* = 2-thiouracil

<400> 26

nnauggnagu gggucgacga c

21

<210> 27

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<213> Artificial Sequence

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<223> Pseudocomplementary, bifunctional siRNA

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<221> misc_feature

<222> 1, 2

<223> n = dT= deoxythymidine

<220>

<221> misc_feature

<222> 18

<223> n = U* 2-thiouracil

<400> 27

nnggcccguc gcccagcnca a

21

<210> 28

<211> 23

<212> DNA

<213> Mus musculus

<400> 28

aagctggccc tggacatgga gat

23